IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate and estimates for the next 5 years, if available, and comments. These tasks, when accomplished, will lead to recovery of bull trout in the Lower Columbia Recovery Unit.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Lead parties are designated in bold type. Listing a responsible party does not imply that prior approval has been given or require that party to participate or expend any funds. However, willing participants will benefit by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan, and is therefore part of a coordinated recovery effort to recover bull trout. In addition, section 7(a)(1) of the Endangered Species Act directs all Federal Agencies to use their authorities to further the purposes of the Act by implementing programs for the conservation of threatened or endangered species.

Following are definitions to column headings and keys to abbreviations and acronyms used in the Implementation Schedule:

<u>Priority Number</u>: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population, habitat quality, or some other significant negative effect short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

<u>Task Number and Task Description</u>: Recovery tasks as numbered in the recovery outline. Refer to the action narrative for task descriptions.

<u>Task Duration</u>: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task, which when combined can reduce the time needed for task completion.

<u>Responsible or Participating Party</u>: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery task. Lead agencies are indicated in bold type. Additional identified agencies or parties are considered cooperators in restoration efforts. Identified parties include:

USFWS U.S. Fish and Wildlife Service

WDFW Washington Department of Fish and Wildlife

YN Yakama Nation

WDNR Washington Department of Natural Resources

BPA Bonneville Power Administration

PC PacifiCorp

FERC Federal Energy Regulatory Commission
WDOE Washington Department of Ecology

EPA Environmental Protection Agency

USFS U.S. Forest Service

WSCC Washington State Conservation Commission

<u>Cost Estimates</u>: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task, are itemized annually for the next 5 years, and includes estimates of expenditures by local, Tribes, State, and Federal governments and by private business and individuals.

An asterisk (*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may

be occurring at reduced funding levels and/or in only a small portion of the watershed.

Double asterisk (**) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (***) indicates costs are combined with or embedded within other related tasks.

	Implementation schedule for the Bull Trout Recovery Plan: Lower Columbia Recovery Unit											
Priority	Task	Task description	Task	Responsible		C	ost estima	ites (\$1,00	00)			
number	number		duration (years)	F	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	Comments	
1	1.1.1	Conduct limiting factors analysis for water quality problems in the upper Klickitat River	2	YN, WDNR, UC, USFS, WDFW	100	50	50					
1	1.2.1	Provide fish passage at Swift (Number 1 and 2) and Yale dams	3	PC, USFWS	600	200	200	200				
1	1.2.2	Provide fish passage at Condit Dam	6	PC, USFWS	60	10	10	10	10	10		
1	1.2.5	Conduct limiting factors analysis for culvert problems	3	WDNR, WDFW, YN, USFS	75	25	25	25				
1	1.2.6	Conduct limiting factors analysis for instream flow problems	3	WDNR, WDFW, YN, USFS, USFWS	75	25	25	25				
1	1.3.1	Maintain current conservation practices on lower Rush Creek	25	USFS	*						Ongoing ²	
1	1.3.2	Protect and restore habitat in upper Rush and Pine creeks	10	USFS, USFWS	500	50	50	50	50	50		

²Ongoing tasks are currently being implemented as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically being done to address bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

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Priority	Task	Task description	Task	Responsible		00)						
number	number		duration (years)	(years)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	Comments	
1	1.3.3	Collaborate with the Yakama Nation	3	YN, USFWS, USFS	30	10	10	10				
1	1.3.5	Conduct limiting factors analysis for floodplain connectivity	3	WDNR, WDFW, YN	75	25	25	25				
1	1.3.6	Conduct limiting factors analysis for impact of roads	3	USFS, WDNR, YN	75	25	25	25				
1	3.2.3	Address road access impacts	3	USFS	30	10	10	10				
1	4.3.2	Establish genetic baselines	3	WDFW, YN, USFWS	180	70	100	10				
1	5.2.2	Develop and implement habitat guidelines	5	USFWS, WDFW, USFS, PC	180	60	60	20	20	20		
1	5.5.2	Identify potential local populations	2	PC, WDFW, USFWS	300	150	150					
1	6.1.2	Protect habitat	10	WDNR, WDFW, USFWS,USFS	2000	200	200	200	200	200		
2	1.1.2	Improve water quality	10	USFS	1000	100	100	100	100	100		

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number	number		duration (years)	rance Parties	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	Comments	
2	1.2.3	Evaluate passage options of bull trout at Speelyai hatchery diversion	2	PC, WDFW	40	20	20					
2	1.2.4	Reduce entrainment	8	PC, USFWS	*						Ongoing	
2	1.2.7	Provide fish passage at Merwin Dam	3	PC, USFWS	300	100	100	100				
2	1.3.4	Work with private landholders	2	USFWS, Private Land Holders	50	25	25					
2	3.1.1	Develop bull trout fishery management plan	3	WDFW, YN	75	25	25	25				
2	3.2.4	Evaluate impacts of fishing regulations	3	WDFW	30	10	10	10				
2	3.3.1	Assess impact of nonnative species	3	WDFW, YN, USFWS, USFS	150	50	50	50				
2	3.3.2	Reduce and/or control spread of nonnative species	25	WDFW, YN	***						Cost estimate dependent upon 3.3.1	
2	3.3.3	Investigate ecological interactions	3	WDFW,YN USFWS,	300	100	100	100				

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number	number		duration (years)	(years)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	Comments	
2	4.3.4	Conduct feasibility study on artificial propagation in the White Salmon and Klidkitat basins	3	USFWS, WDFW, YN	10	5	5					
2	4.3.5	Conduct artificial propagation where deemed necessary and appropriate	3	USFWS, WDFW, YN	20		10	10				
2	5.2.1	Standardize and implement sampling protocol for bull trout	5	USFWS, PC, WDFW	140	60	20	20	20	20		
2	6.3.2	Coordinate with State bull trout management plans	5	WDFW, USFWS	*						Ongoing	
3	3.1.2	Conduct assessment of nutrient levels and cycling	3	PC, WDFW, USFS, USFWS	60	30	30	30				
3	3.2.1	Provide information to anglers	3	WDFW	30	10	10	10				
3	3.2.2	Investigate and minimize incidental or illegal catch of bull trout	3	WDFW	225	75	75	75				
3	4.3.1	Develop genetic protocols	3	USFWS, WDFW, YN	*						Ongoing	
3	4.3.3	Evaluate hybridization with brook trout	3	WDFW, USFS USFWS,	*						Ongoing	

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number	number duration (years)		Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	Comments			
3	5.5.1	Conduct fish surveys	5	WDFW, USFS, USFWS	100	20	20	20	20	20		
3	6.1.1	Support collaborative efforts by local watershed groups	5	USFWS, UC, WDFW, USFS, YN	1000	200	200	200	200	200		
3	6.1.3	Coordinate recovery efforts	5	USFWS, NMFS, WDFW, YN	250	50	50	50	50	50		
3	6.2.1	Participate in relicensing activities	5	USFWS, PC	*						Ongoing	
3	6.3.1	Continue management of U.S. Forest Service lands under Northwest Forest Plan and INFISH	25	USFS	*						Ongoing	
3	7.3.1	Periodically review progress toward recovery goals and assess recovery task priorities	25	USFWS	*						Ongoing	